

*C2*

the data in FIFO 48 and, accordingly, generates a video message, or tag, which contains the DTS and the address of the stored data in FIFO 48. In other words, for each data pack 200, SD 26 generates a tag containing information about both the decode time stamp as well as the address of the stored data in FIFO 48. The generation of the tags is a significant advantage of decoder 20.

*Sub E 6 C3*

Page 10, amend the paragraph beginning at line 7 as follows:

The video messages, or tags, thus generated are made available to CPU 54 for further synchronization and control of decoder 20. Using the information stored in a tag, CPU 54 generates a Task Definition Packet (TDP) containing instructions to video decoder 36 about the location of the data in FIFO 48. Upon the arrival of the next Vsync signal, video decoder 36 decodes the data identified by the TDP. If no TDP has been generated by CPU 54, video decoder 36 does not decode any data at the occurrence of the Vsync signal.

*C4 Sub E 10*

Page 14, amend the paragraph beginning at line 22 as follows:

After depacketizing an audio frame, SD 26 stores the PES payload in buffer 48 and generates an audio message, or a tag, informing CPU 54 of the location of the stored audio frame in the buffer. Consequently, SD 26 has knowledge of both the location of the audio frame in the buffer as well as its corresponding time stamp. SD 26, however, does not know the offset between the beginning of the packet and that of the frame.

*Sub E 18 C5*

Page 26, amend the paragraph beginning at line 9 as follows:

Fig. 9 provides a message queue 106 in accordance with one embodiment of the present invention. Message queue 106 includes tags consisting of the above-mentioned audio and video messages generated by SD 26 for use by CPU 54. Message queue 106 is a FIFO queue stored in a sub-buffer of buffer 48 of Fig. 1. In particular, when SD 26, as discussed above with respect to Figs. 1 and 5, identifies significant information such as the location of the start of a new video frame or a presentation time stamp of a particular video frame, then SD 26 generates a tag (video message) such as a tag 108 and stores tag 108 in message queue 106. In one embodiment, SD 26 generates a message that audio or video data

is stored in buffer 48 of Fig. 1 and ready for decoding even prior to storing all the audio or video data, respectively, in buffer 48. CPU 54 periodically accesses message queue 106 (e.g., every Vsync) and reads the tags in real time.

Page 26, amend the paragraph beginning at line 26 as follows:

In particular, message queue 106 provides a FIFO queue such that the most recent event is stored in the tag that is at the top of the FIFO queue. For example, referring to Fig. 8, if video data is identified prior to audio data in byte stream 100, then a tag (video message) in message queue 106 identifying a time stamp for the video data of byte stream 100 would be lower in message queue 106 than a tag (audio message) identifying a time stamp for the audio data (e.g., such tags may also include an address identifying the location of the audio and video data, respectively, in buffer 48 of Fig. 1).